



#4

Mold

1645

2368/24

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: William S. Somers, Jin Tang, Raymond  
Caraphausen, and Jasbir Seehra

Serial No.: 09/859,722

Filed: May 17, 2001

For: CRYSTAL STRUCTURES OF P-SELECTIN, P- AND  
E-SELECTIN COMPLEXES, AND USES THEREOF

Art Unit: 1645

"Express Mail" mailing label No. EL613312459US  
Date of Deposit: December 10, 2001  
I hereby certify that this paper or fee is being  
deposited with the United States Postal Service  
"Express Mail Post Office to Addressee" service under  
37 CFR 1.10 on the date indicated above and is  
addressed to the Commissioner for Patents,  
Washington, D.C. 20231.  
Name: Lisa M. Melanson  
Signature: Lisa M. Melanson

**RECEIVED**  
DEC 17 2001  
TECH CENTER 1600/2900

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §§§ 1.56, 1.97, and 1.98, applicants enclose herewith forms PTO/SB/08A and /08B, containing references which may be deemed relevant to the above-identified application, along with copies of each of the documents cited therein. Documents 1-9 in forms PTO/SB/08A and /08B were cited by the International Searching Authority in a related PCT application (application no. PCT/US01/16108). Applicants also enclose, for the Examiner's convenience, copies of forms PCT/ISA/210 and /220 from the related PCT application. The Examiner is respectfully requested fully to consider all of the enclosed items, and independently to assess their teachings.

It is believed that no fee is necessary in connection with the filing of this Information Disclosure Statement because it is being filed before the mailing date of a final action or a Notice of Allowance, and the references were cited in a communication from a foreign patent office, in a counterpart foreign application, not more than three months prior to the filing of this Information Disclosure Statement.

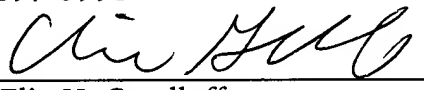
Applicants: William S. Somers, Jin Tang, Raymond  
Camphausen, and Jasbir Seehra  
Serial No.: 09/859,722  
Filed: May 17, 2001  
Page 2

However, if the Examiner deems that a fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 01-1785.

Respectfully submitted,

AMSTER, ROTHSTEIN & EBENSTEIN  
90 Park Avenue  
Attorneys for Applicants  
New York, New York 10016  
(212) 697-5995

Dated: December 10, 2001  
New York, New York

By:   
Elie H. Gendloff  
Registration No. 44,704

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

+

**Complete if Known**

(use as many sheets as necessary)

Sheet	1	of	2
-------	---	----	---

<b>Application Number</b>	09/859,722
<b>Filing Date</b>	May 17, 2001
<b>First Named Inventor</b>	William S. Somers
Group Art Unit	1645
<b>Examiner Name</b>	TBA
<b>Attorney Docket Number</b>	2368/24

A circular stamp from the Office of Intellectual Property (OIPE). The text "OIPE" is at the top, "OFFICE" is on the right, and "10 2001" is in the center. The word "PATENT" is partially visible at the bottom.

RECEIVED  
DEC 7 1 2001  
TECH CENTER 1 800 262 0000

[illegible][illegible]

Date	
Considered	

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

+

Please type a plus sign (+) inside this box → +

PTO/SB/08B (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

### Compleat if Known

Application Number	09/859,722
Filing Date	May 17, 2001
First Named Inventor	William S. Somers
Group Art Unit	1645
Examiner Name	TBA
Attorney Docket Number	2368/24

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	4	Graves et al., Insight into E-selectin/ligand interaction from the crystal structure and mutagenesis of the lec/EGF domains. Nature, 367:532-36, February 10, 1994.
	5	Hiramatsu et al., Studies on selectin blocker. 3. Investigation of the carbohydrate ligand sialyl Lewis X recognition site of P-selectin. J. Med. Chem., 39(23):4547-53, 1996.
	6	Ng and Weis, Structure of a selectin-like mutant of mannanose-binding protein complexed with sialylated and sulfated Lewisx oligosaccharides. Biochemistry, 36(5):979-88, February 4, 1997.
	7	Revelle et al., Single amino acid residues in the E- and P-selectin epidermal growth factor domains can determine carbohydrate binding specificity. The Journal of Biological Chemistry, 271(27):16,160-170, July 1996.
	8	Somers et al., Insights into the molecular basis of leukocyte tethering and rolling revealed by structures of P- and E-selectin bound to SLex and PSGL-1. Cell, 103:467-79, October 27, 2000.
	9	Thakker et al., Design and synthesis of novel selectin inhibitors. Book of Abstracts, 218th ACS National Meeting, New Orleans, August 22-26, 1999 (Abstract).

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.